

Smart Grid & T-Mobile

John Horn

National Director – M2M

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T-Mobile

Agenda

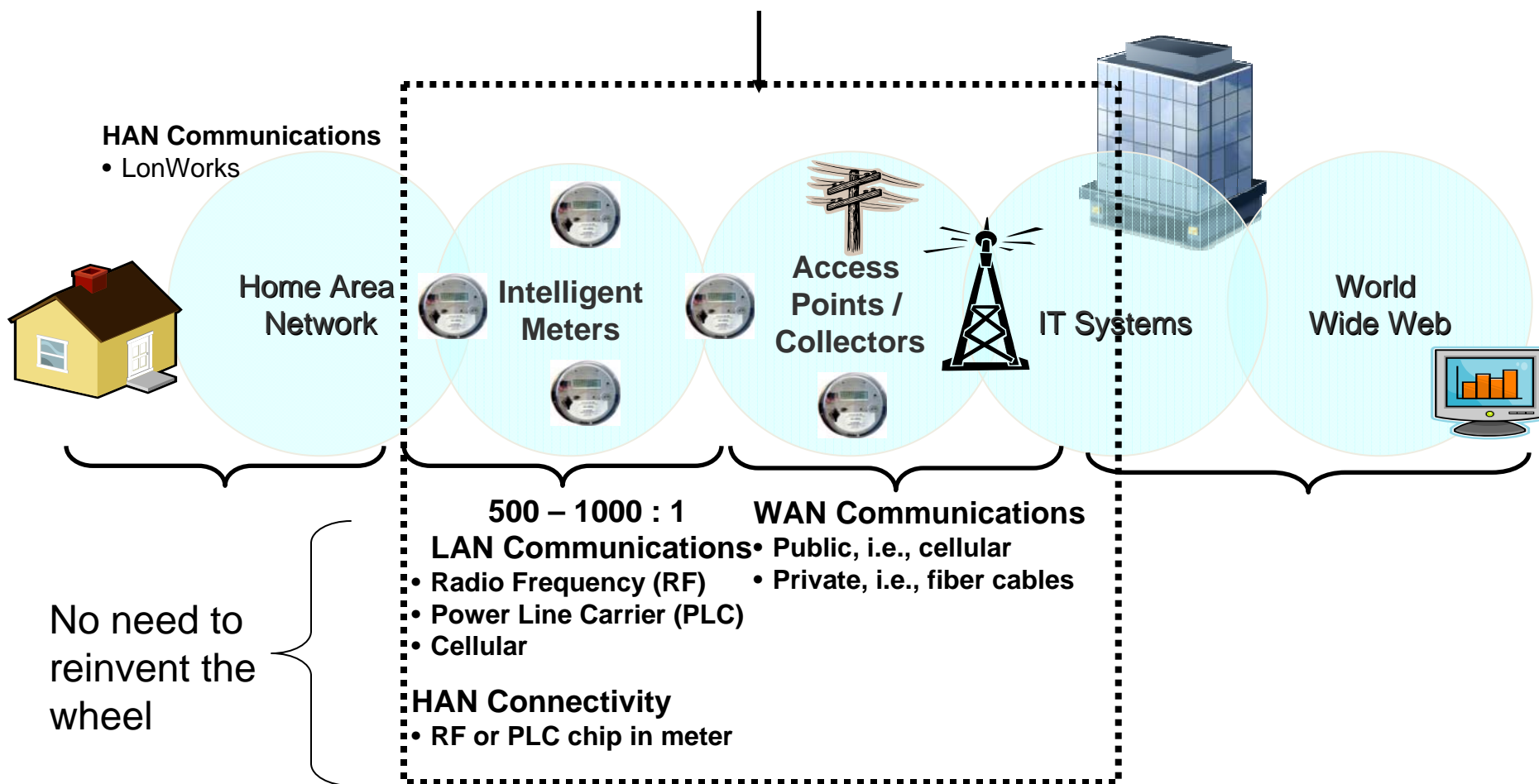
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Changing Focus and Getting Results

Private Network Architecture

The solutions from the meter to the AMI operating system at Utilities office

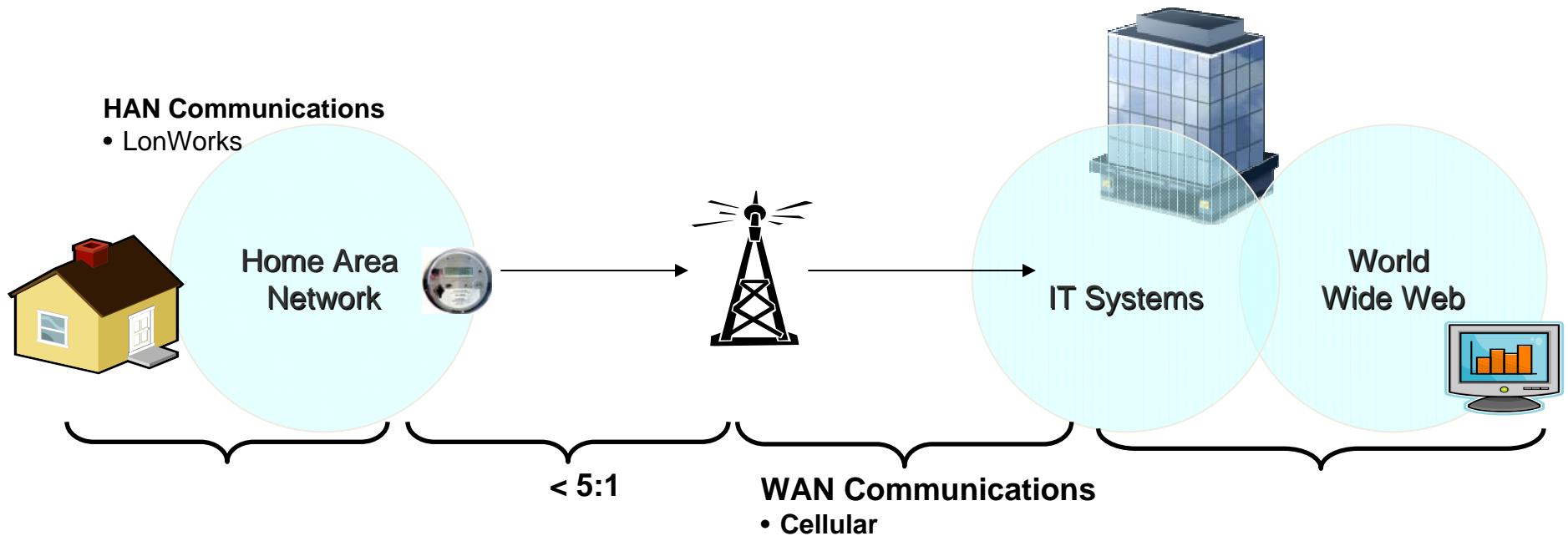
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Public Network Architecture – TMO

The solutions from the meter to the AMI
operating system at Utilities office

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What Is In The Way?

Regulation and Tax Policy

“Administration officials, frustrated that Americans aren’t embracing simple, energy-efficiency changes, are looking at economic transactions where the person expected to make a purchase isn’t the one who benefits” WSJ 3/8/10

A Utility is incented to spend more money on CAPEX even if a simple OPEX solution is available, and sometimes much more money. Rate based policies are driving nonproductive business practices.

This change alone can change the way the world works in connected energy.



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Partnering
with Utilities



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A New National Broadband Message



Benefits of Partnering

- **Network Expansion Offering**
 - T-Mobile expands or fills in footprint utilizing utilities assets
 - Residential Areas and Commercial Areas
 - Easier access into hard to reach neighborhoods
 - Utility utilizes turn-key public network
 - Reduced Site Acquisition Cost
 - Reduced Lease Payments
 - Long term contract with mutual benefits


- **Pole-Attachment Agreements**
 - Renegotiate Pole Attachment Agreement (40 currently executed)
 - Barter to reduce or eliminate lease fees
 - Negotiate New Pole Attachment Agreements
 - Target expensive roaming areas or weak coverage areas

- **T-Mobile Total Solution**
 - Smart Grid Communications
 - Enterprise Business – EPP Plans and Extranets
 - Fleet Management through M2M partners

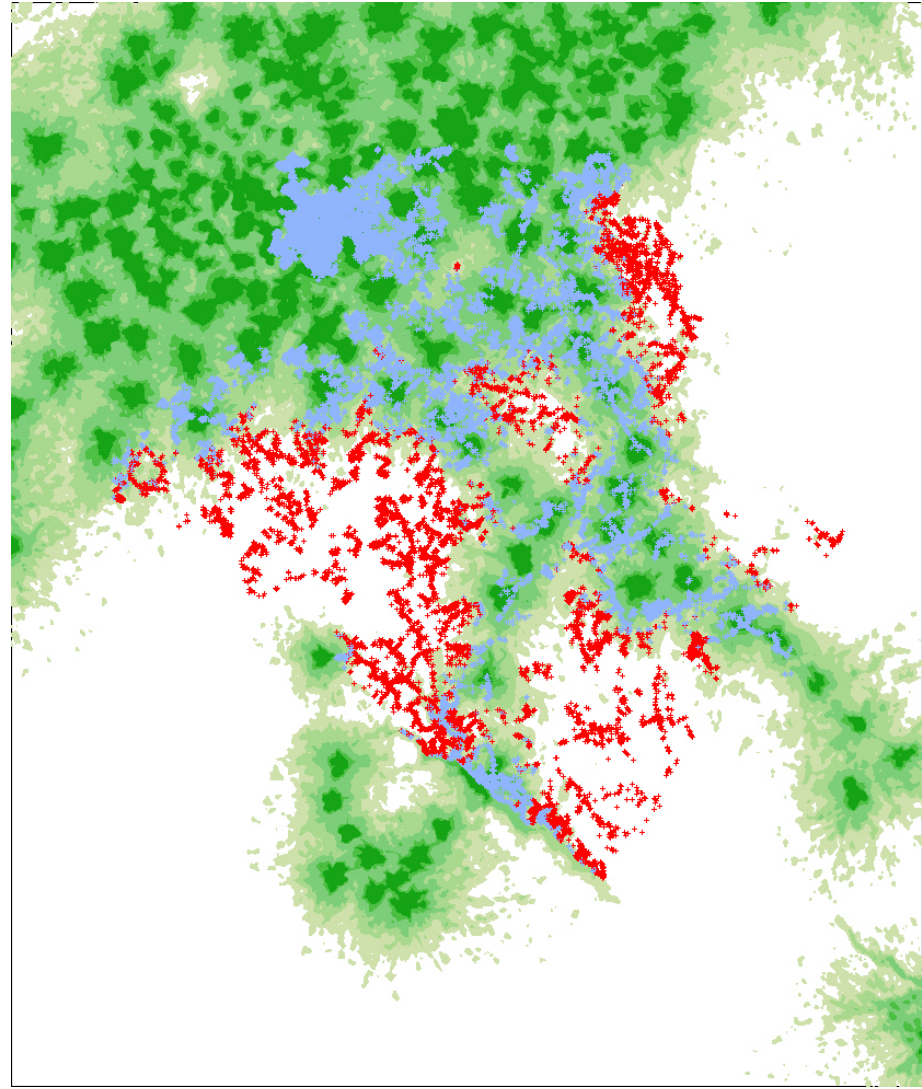
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Sample Service Territory

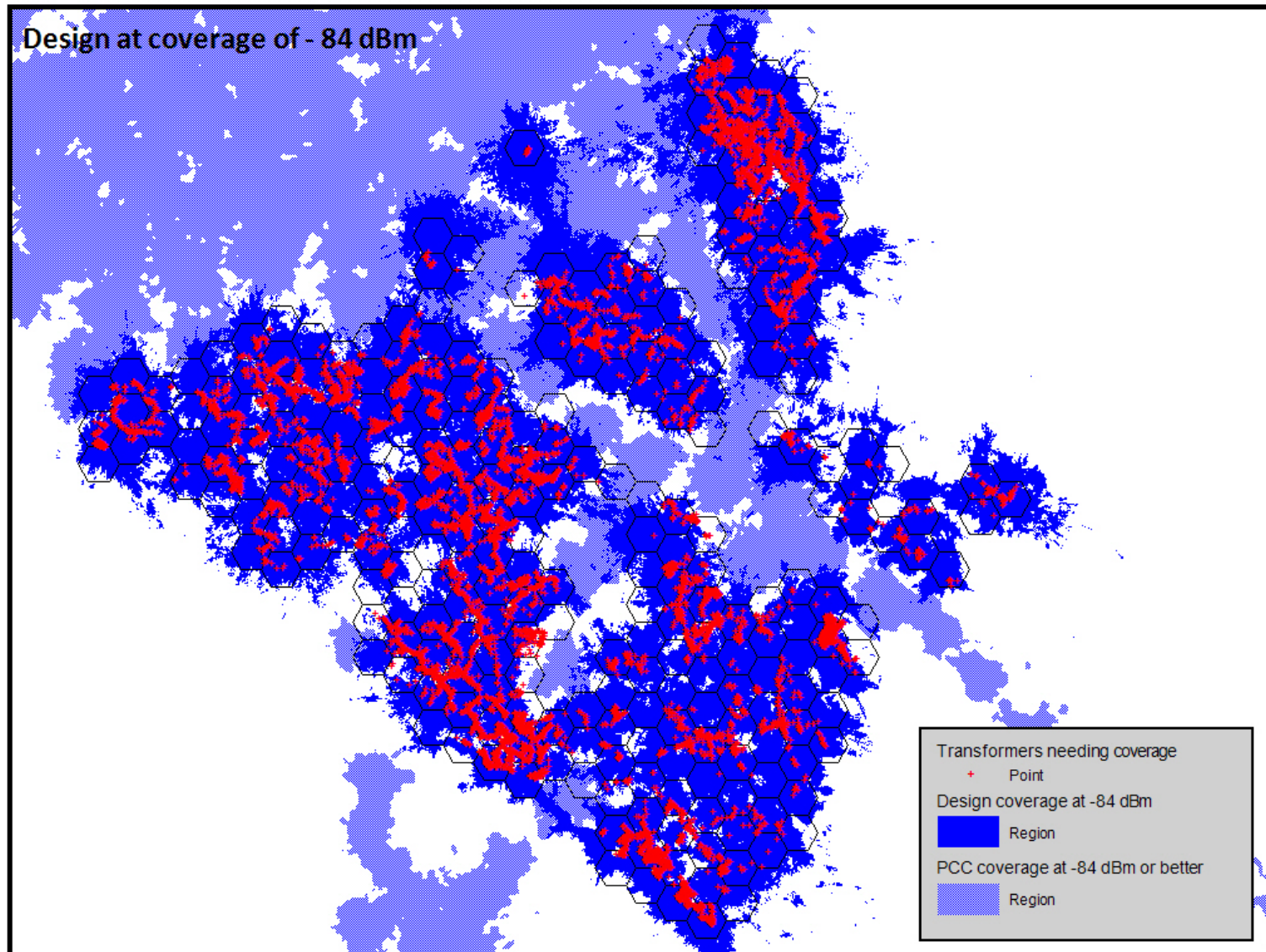
Analysis of current voice & data coverage

-  T-Mobile coverage outside utility territory (all shades of green)
-  T-Mobile coverage of utility transformers
-  Proposed T-Mobile coverage expansion

Approx. 2/3 utility transformers currently covered by existing T-Mobile cell sites.



217 sites to provide full voice & data coverage (– 84 dBm level)





Site Count to provide 99% coverage to Utility Service Territory

- 217 sites to cover utility territory
 - Full voice and data coverage
 - -84 dBm coverage (3 bars or better)
- Capex reduced by 50%
 - Reduced Site Acquisition Cost
 - Reduced Lease Payments
- Smart Grid connectivity rates reduced
- Enhances Rural Coverage



Thank you!

John Horn
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